

Emerging Contaminant Vertical Borehole Profiling

The U.S Environmental Protection Agency (EPA) defines an emerging contaminant as a chemical or material that is characterized by a perceived, potential, or real threat to human health or the environment or by a lack of published health standards.

Per-and polyfluoroalkyl substances (PFAS) are a class of emerging drinking water contaminants that have shown widespread occurrence in groundwater. Current regulatory health advisory levels for PFAS in groundwater are in parts per trillion (ppt), orders of magnitude lower than regulatory levels for most groundwater contaminants.

EDN has been on the technical forefront of developing and implementing best practices for downhole testing and formation evaluation for emerging contaminants including PFAS. To the maximum extent practicable, PFAS has been eliminated from the materials of construction of the down-hole tooling and multi-level completion systems used in EDN’s service platform.

The following is a listing of notable PFAS sites where EDN’s services have been utilized to evaluate the vertical extent of PFAS groundwater impacts:

Project / Site Location	Services		Client	Contaminant
NAS Willow Grove, Bucks County, PA	Borehole Geophysical Logging	Straddle-packer testing with digital data logging	AECOM	PFAS
Horsham Water and Sewer Authority, Bucks County, PA		Straddle-packer testing with digital data logging	Gilmore and Associates	PFAS
HAGS Willow Grove, Bucks County, PA		Straddle-packer testing with digital data logging	Leidos	PFAS
NAWC Warminster, Bucks County, PA	Borehole Geophysical Logging	Straddle-packer testing with digital data logging	Warminster Municipal Authority	PFAS
Easton Road PFC Site, Bucks County, PA	Borehole Geophysical Logging	Straddle-packer testing with digital data logging	Tetra Tech	PFAS